

# **A I D S TREATMENT N E W S**

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Hundreds of thousands if not millions of patients had problems getting their Medicare Part D prescriptions filled in January 2006, and many failures continue. Some states have provided emergency relief as a temporary measure. This article -- which applies only to persons eligible for MediCARE -- explains some of the major problems and what is being done to relieve them, and suggests online and telephone resources for information, and for reaching people who can answer questions when necessary.

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The U.S. has an apparently growing problem with fake, counterfeit drugs entering the mainstream drug supply, and being fraudulently sold at full price in regular pharmacies and hospitals; some have no active ingredient, or too little, or substitute a cheap drug for an expensive one. The FDA has asked drug manufacturers to develop technology to track all shipments electronically as they move through the distribution chain; currently, RFID (radio frequency identification) is the preferred method for doing so. This article explains what is happening, and why we do not believe that this use of RFID is a privacy threat -- though other privacy issues are among the most important questions we face today.

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### **About This Issue**

In the first few days of January it seemed that the widely predicted Medicare train wreck on prescription drugs was not as bad as predicted -- but that was because few of those eligible (which includes about 20% of people in HIV care) happened to go to a pharmacy and try to fill any prescriptions just then. And word was slow to get around, because Americans are trained that problems with institutions are personal matters to face on their own. But hundreds of thousands of patients who could not fill urgent prescriptions they were legally entitled to became impossible to ignore.

The other major article covers three topics that we found hard to separate: drug

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## Statement of Purpose:

*AIDS Treatment News* reports on experimental and standard treatments, especially those available now. We interview physicians, scientists, other health professionals, and persons with AIDS or HIV; we also collect information from meetings and conferences, medical journals, and computer databases. Long-term survivors have usually tried many different treatments, and found combinations that work for them. *AIDS Treatment News* does not recommend particular therapies, but seeks to increase the options available.

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To protect your privacy, we mail first class without mentioning AIDS on the envelope, and we keep our subscriber list

counterfeiting, RFID tracking to control it, and privacy. This issue has nothing to do with importing generic drugs, which do not have forged labels claiming to be some other company's product -- and these counterfeits are overwhelmingly made domestically, probably to avoid scrutiny at borders, and also because they can be forged locally since counterfeits do not need any particular ingredient but are devised as opportunity presents. RFID (radio frequency identification) is the technology most discussed to help combat this problem in a way that pharmaceutical distributors may accept. We explain why this specific use of RFID is unlikely to cause privacy problems. But otherwise privacy is very much in the news today, and has become a forum for some of the critical issues of our time.

*AIDS Treatment News* has traditionally published a short index and a list of buyers' clubs in our December issue. This is the December issue -- delayed until early February, in part by the Medicare article we did not expect to write. Due to lack of space, we moved the buyers' club list to our next issue.

## Medicare Prescription Nightmare: Overview January 28, 2006

by John S. James

[February 5, 2006] Many thousands of people could not continue filling even their current prescriptions after the new Medicare Part D (prescription drug coverage) started January 1, 2006. Many thousands are wrongly being told to pay hundreds of dollars, when they are on Medicaid or otherwise approved for Extra Help -- or wrongly told they need prior authorization for antiretrovirals, psychiatric drugs, or certain other medications, when Medicare does not allow the insurance plans to require it. Here is a quick overview of some of the biggest problems.

See the greatly simplified "help is here" pages on the official Medicare site [1] (in the "Resources for Help on Medicare Part D" section below). If these work, it suggests that streamlined emergency procedures are being introduced to help people get their medications quickly.

For detailed written information, see the

Resources section below, especially [2].

If you have trouble reaching a person to answer a question, see [8] for a list of telephone numbers in all states.

Note: If you are not eligible for Medicare, then none of this article applies to you.

Note: About half of the U.S. states have started paying for emergency coverage (often through people's Medicaid cards -- often called Medical Assistance), hopefully until the federal system gets straightened out.

Note: Save all official paperwork and keep it together. Do not throw anything away -- even if you do not understand it, or have decided not to use it.

Note - February surprise: "Dual eligible" patients (on both Medicare and Medicaid) who voluntarily chose a Medicare Part D plan were often assigned to a different plan due to the automatic assignment of most dual eligibles. On February 1 Medicare cleaned its database, and many of these people were switched to the plan they had originally chosen. This is good -- except that patients may not have received notification, and their pharmacy may try to charge the wrong plan. Such patients will probably need their card (or at least their number) in the plan they chose. If Medicare Part D prescriptions stop going through at the beginning of February, this possibility should be considered.

The information about the new Medicare Part D program and its problems is changing daily, so note the date of this article above. Check the Web sites in References, below, and check elsewhere, to get the most recent information.

We regret the length and complexity of this article, but the complexity of the system chosen to deliver the new drug benefit is insane. It will live as a monument to madness that millions of people must go to such trouble just to deal with the process of paying for prescription drugs -- and that millions still cannot get the drugs they need and are legally entitled to. So many patients will need expert assistance that there will not be enough experts to go around. We expect to publish shorter, updated articles that will focus on resources and help for getting proper medical care.

## Overview

Many of the Medicare part D (drug benefit) problems result from errors in computer databases that will have to be corrected case by case -- at the federal government, maybe at

state governments, and at the private Medicare Part D plans, so that the pharmacies will get the right eligibility information. Most patients will need help getting the errors in their records fixed, if necessary.

But the improper prior-authorization demands could and should be fixed for everybody at once, in each health plan, without needing case-by-case attention. Some progress has been made, as AIDS and other service and legal organizations repeatedly show the insurance companies running the Part D plans that requiring prior authorization for certain drugs including all antiretrovirals (except Fuzeon when patients start it) is against the federal Medicare policy the companies accepted when they offered their plans, and is probably illegal. But companies have incentive to find excuses to refuse to pay, both to save the cost of the medicines, and more importantly to change their patient mix by driving expensive patients away.

The situation is different in each state and area. For example, each Medicare Part D plan works in particular regions, and with only certain pharmacies in its region. This makes it hard to provide national information, advice, or advocacy.

Many patients are getting their prescriptions filled correctly under the new Medicare program. But many others are not.

California did keep figures, and found that 200,000 out of one million Medicaid recipients (who were automatically enrolled in a Medicare Part D plan starting January 1, 2006) have had problems getting prescriptions filled so far. The true problem could be even greater, as presumably many of the one million had not tried to fill a prescription in early January, and some will not be on prescriptions at all; these must be excluded from the denominator to get a correct error rate.

The failures in starting the new Medicare Part D program could kill more people than Hurricane Katrina, if patients cannot get essential medicines and stop taking them arbitrarily.

## Three Main Problems So Far (January 2006)

The following seem to be the worst problems, because they affect the most people. But there are many others.

1. Patients who are officially eligible for "Extra Help" are being charged up to hundreds of dollars for prescriptions, when they should be charged no more than \$5 per prescription (or 15% of the sale price if their countable

income is in the range of 135% to 150% of federal poverty guidelines), because their eligibility for Extra Help is not recognized by the system. See "help is here" [1].

On Extra Help, one expert told us, "Patients with screwed up enrollments have to repeat forcefully and continually that they are Extra Help patients (in whatever of the 3 categories: under 100% FPL (federal poverty level, or guidelines); 100 to 135% FPL; or 135% to 150% FPL, each time they call, talk to, email, correspond with or fill out a form with SSA (Social Security Administration), CMS (Centers for Medicare and Medicaid Services), the various 800 numbers, state Medicaid offices, state health insurance counseling offices, ADAP offices and workers -- and most especially, with the Part D plans themselves (who are very, very inexperienced with welfare, Medicaid, ADAP, or any poor people's issues and therefore have to have patients' exact extra help status and be reminded repeatedly." If you are on Medicaid, your Medicare Part D plan and your pharmacist may need to know that as well.

Note: most persons on Extra Help pay the same copays for a 30-day or 90-day supply of drugs -- so it helps to get the doctor to write prescriptions for 90-day supplies when appropriate. Many low-income patients are burdened by the copays -- for example, 10 prescriptions at \$5 each is an extra \$50 a month if the doctor writes 30-day prescriptions -- but two-thirds less (\$50 for three months) with 90-day prescriptions.

2. Other patients are not recognized as in Medicare Part D at all, and are being charged full price for the drugs. They may not know what plan they are in, or have gone to a pharmacy that does not deal with their plan. Or they may have been lost in the computers for some reason. See "help is here" [1] and other information in "Resources for Help on Medicare Part D" below. Also, a pharmacist may be able to find your plan by submitting an E1 request to Medicare; for a one-page sheet on how pharmacists can do so, see "help is here" [1], and/or see [6].

3. Patients are wrongly being told that they need prior authorization for antiretrovirals. This is not allowed, (except for patients starting Fuzeon, the most expensive HIV medicine). See "Prior Authorization Problems" below.

### **Good News: Many States Temporarily Continued Medicaid Prescriptions**

### **for Dual Eligibles**

As an emergency response to the Medicare Part D crisis that started January 1, 2006, about half of all U.S. states so far have taken action to pay for prescriptions as a last resort. For people in those states, this can work for the more than seven million "dual eligibles" who are not only on Medicare but were also on Medicaid (sometimes known by another name, such as Medical Assistance in many states, or Medi-Cal in California) -- because pharmacies can bill the states through people's Medicaid cards. Many of these cards (of patients also on Medicare) stopped covering prescriptions on January 1 -- but states that are willing to pay can quickly turn the prescription coverage back on. And since pharmacies have continued to bill through Medicaid for patients on other programs (including children, and welfare mothers), whose Medicaid prescription coverage was never turned off, the Medicaid billing infrastructure still exists in the drugstores.

In practice, this emergency program may only work for patients who already have a Medicaid card -- otherwise it is likely to be logistically impossible, given all the difficulties in the current program. So those eligible for Extra Help but not in Medicaid will need to straighten out the Extra Help enrollment and get in the Medicare Part D plan the patient chooses, as quickly as possible.

### **Prior Authorization Problems**

Health insurance companies use prior authorization to control the cost of expensive drugs, by making sure they are prescribed for medically recognized uses. For drugs like Viagra, or narcotics, that patients may strongly want for non-medical uses, prior authorization can make sense, because it relieves the doctor of having to be the one who says no when patients want drugs for recreational or financial instead of medical reasons. Companies usually require prior authorization for only a handful of drugs (although hundreds of others may be off the formulary and require a cumbersome appeals process for that reason).

The federal Medicare program is requiring that all the new Part D prescription plans cover "all or substantially all" of the drugs in the antidepressant, antipsychotic, anticonvulsant, anticancer, immunosuppressant and HIV/AIDS categories." "For HIV/AIDS drugs, utilization management tools such as prior authorization and step therapy are generally not employed in widely used, best practice formulary models (except as noted in Attachment I [which allows

prior authorization for patients starting Fuzeon]) ... This policy is in place for 2006, the first year of the Medicare drug benefit and a unique year in terms of a large number of beneficiaries transitioning to new formularies. We will reevaluate the formulary guidance for these categories for 2007..." [5]

Despite this clear rule, there have been widespread complaints that Medicare health plans have demanded prior authorization for antiretrovirals. One major company told *AIDS Treatment News* it "lifted" this requirement, after questions from media and service organizations -- but later we heard that this company had a stack of paperwork for 4,000 patients waiting for prior authorization for antiretrovirals. Finally the change did get in the computers, so people on that plan can continue getting their antiretrovirals as Federal policy requires. We do not know if those waiting have been notified. And this fix was for one company; there are about a hundred Medicare Part D plans around the country.

Prior authorization for antiretrovirals makes no sense. Nobody takes these drugs for fun. And unless a doctor is grossly incompetent, insurance companies will not be able to improve on the doctor's decisions, due to the complexity of HIV medicine. (Prior authorization for patients starting Fuzeon is less of a concern, since the consensus on when to use it has become fairly clear. And patients do not want Fuzeon anyway unless clearly necessary, since it is harder to use as it must be prepared and injected twice a day.)

It is unconscionable to use prior authorization to create paperwork obstacles in order to avoid paying for people's medicines -- or to drive expensive patients out of the plan. We do not know how widely this is happening, but it may be extensive.

Patients are being hospitalized today due to Medicare Part D problems. Other patients are going off psychiatric drugs and having relapses. No one knows how many have stopped taking some or all of their medicines because they cannot get them.

### **Comment: Why Did This Happen?**

How was the Medicare Part D mess allowed to happen, and why is it so severe. There are several reasons.

1. In industry, government, or anywhere else, how many huge, complex data-processing projects get finished on time and work acceptably well from the day they start? Not very many. The startup of Medicare Part D is

one of the most complicated data-processing projects in history -- involving different Federal databases, at least one database in each of the 50 states, databases in about a hundred private companies that offer the Part D plans, computers in the pharmacies that those plans choose to work with, and millions of individuals whose health care is at stake -- all dealing with complex new laws and rules. All these parties had to learn to work together. And on the absolute deadline of January 1, everything went live, with critical or life-threatening consequences for many thousands of people who depended on it for major ongoing care. No effective backup plan was provided for the possibility that everything would not work perfectly.

2. When Congress wrote the law creating Part D, Democrats who had always taken the lead on health issues were locked out and had no input. The idea was that Republicans would use their power to take the health issue away from Democrats, and triumphantly take credit for being the party that finally created a prescription-drug benefit.

3. When patients are denied drugs and as a result are hospitalized at far greater expense than what the drugs would have cost, the insurance plan that made the decision does not pay that expense. Instead it comes out ahead by saving money on the drugs, and also by pushing expensive patients to some other plan. This creates a strong incentive for all plans to race to the bottom, especially since their competitors are doing the same. These insurance companies must watch their reputations -- but if a plan can mislead the press and public and hold on until most of the expensive patients are gone, it will be well positioned to make money.

As has been clear for years in AIDS, health insurance in the U.S. is primarily a cherry-picking business. Companies make their money by one way or another getting rid of expensive patients and keeping only healthy ones that need little medical care. The law may not let them reject patients for prior conditions -- anyone eligible for the federal program, sick or well, can join their plan. But the companies have many other strategies, from driving out the medical specialists expensive patients need, to creating obstacles to getting their medicines. Such ugly tactics, which companies use but do not talk about, will continue to cause serious problems. Yet, as leading economist Paul Krugman points out recently when writing on the success of the U.S. Veterans Administration health system, in Medicare Part D the insurance companies

"serve no real function" (Paul Krugman, "Health Care Confidential," *New York Times*, January 27, 2006). The whole insurance mess was unnecessary;.

The larger problem is that corporations, government, and other institutions are too corrupt today to fix themselves. A widespread public consensus might stop the abusive mismanagement of the dominant institutions, but that has not happened yet.

People have not found the right alternatives in which to place and organize their energies. If they did, the whole picture could change.

## **Resources for Help on Medicare Part D**

Here are some starting points for getting help. This list is far from complete, and we expect to publish updated versions.

[1] See the federal Web site, <http://www.medicare.gov> -- or call 1-800-MEDICARE. The Centers for Medicare and Medicaid Services (CMS) is in many respects doing a good job, within the limitations it was given by Congress and the constraints of national politics. Note their "help is here" page, <http://www.medicare.gov/help-is-here.asp>

[2] Detailed information about the new Medicare Part D program that started January 1 is at the Medicare Rights Center; see "Medicare Drug Coverage 101; Everything You Need to Know About the New Medicare Prescription Drug Benefit," <http://www.medicarerights.org/101.html>

[3] For a short overview, see Treatment Access Expansion Project, <http://www.taepusa.org> Always check the latest information, but their fact sheets, "The New Medicare Drug Benefit: An HIV/AIDS Enrollment Tool Kit," published October 2005, gives an understandable outline to start with. It was written for organizations that are advising patients.

[4] State ADAP programs are compiling information for each state. You can reach your state's program through <http://www.atdn.org/access/states/> Also check with local AIDS organizations. For example, <http://www.gmhc.org> has much information for New York State.

[5] "Why is CMS requiring 'all or substantially all' of the drugs in the antidepressant, antipsychotic, anticonvulsant, anticancer, immunosuppressant and HIV/AIDS categories?" [www.cms.hhs.gov/PrescriptionDrugCovContra/Downloads/FormularyGuidanceAllorSubAll.pdf](http://www.cms.hhs.gov/PrescriptionDrugCovContra/Downloads/FormularyGuidanceAllorSubAll.pdf)

[6] Tips to Help with an Eligibility (E1) Check, National Community Pharmacists Association, <http://www.pharmacistlink.com/Medicarerx/RxBytes/20060112rxbytes.asp>

[7] For more information on fixing Medicare Part D problems, and also on the class-action lawsuit against CMS, see <http://www.php.org>

[8] For questions, information, and guidance, you might be able to get through faster to the State Health Insurance Assistance Program than to Medicare, etc. The numbers for all 50 states, Washington DC, and the U.S. Virgin Islands are listed at <http://www.medicare.gov/contacts/static/allStateContacts.asp>

Note: Several people including Tom McCormack, Public Benefits Policy Consultant to the Title II Community AIDS National Network (TIICANN), helped *AIDS Treatment News* research this article. TIICANN, a national nonprofit that advocates for better HIV care and benefits, can be reached at <http://www.tiicann.org>.

## **FDA, Companies Test RFID Tracking to Prevent Drug Counterfeiting**

by John S. James

The FDA has asked the pharmaceutical industry for help in testing technology to track drugs electronically through the supply chain to prevent drug counterfeiting -- a huge worldwide problem that mushroomed in the U.S. several years ago, centered especially in Florida at that time. The FDA wants systems in place by 2007, and testing is beginning now. The leading tracking technology at this time is RFID (radio frequency identification). Among the first drugs to try this system are Viagra (Pfizer), Oxycontin (Purdue Pharma), and one HIV drug, Trizivir (Glaxo). For obvious reasons expensive drugs (or those with street value) are most likely to be faked.

### **Drug Counterfeiting**

Several years ago *AIDS Treatment News* published warnings from the FDA that fraudulent, counterfeit drugs had entered the mainstream U.S. supply. These were sold to patients at full price in standard pharmacies or hospitals (not through unconventional channels like unregulated Web sites). Sometimes the fake drugs had no active ingredient; sometimes a cheap drug in the same class was substituted for an expensive one; sometimes the fake contained the right drug but in a much lower dose; and sometimes the drugs were real, but had been stolen and re-sold. Doctors or patients could be shown how to detect tiny anomalies in the printing on some packages or on the labels of bottles, but other times the fakes were so good that even experts could not identify them without

chemical testing. Some of the fake or illegal drugs were not kept at proper temperatures and could have deteriorated chemically -- sometimes baking in trunks of cars in the sun while deals were made in parking lots. No one knows how big the problem is, because many fakes are never detected; if a patient does not respond, that is attributed to the illness or other factors, and no one knows that the patient never received the treatment they thought they were taking.

How could this happen to mainstream medicines that are sold by leading U.S. pharmacies and hospitals? The consensus is that bad drugs enter the supply through the "secondary market" in pharmaceutical distribution -- a system that is mostly legitimate, but has been open to abuse.

U.S. pharmaceutical companies seldom sell their drugs directly to pharmacies or hospitals -- for various reasons, probably mainly because the profit margins for distributors are vastly less than for selling patented medicines. Instead they sell mainly to a few large distributors. In addition there is the secondary market of thousands of small distributors, who make tiny profits by looking for deals where they can buy a batch of drugs and sell it for a little more than they paid for it.

Most of these companies are honest, but temptations occur. For example, somebody struggling to get by on a margin of 2% or less may jump at a chance to buy a drug from another distributor for, say, a third less than the manufacturer ever charges. The low price might possibly be legitimate -- the result of a deal that went bad, leaving someone with stock they needed to unload. But it could also mean that the drug was fake, or stolen. When one deal could solve a business's serious financial problems, there is an incentive not to ask questions.

For more information on drug counterfeiting see the important book *Dangerous Doses: How Counterfeiters Are Contaminating America's Drug Supply* [1], by Katherine Eban, an investigative reporter who has worked for *The New York Times*, ABC News, and other major publications; an August 31 Federal indictment and press release featuring some of the same characters [2]; and the FDA's page on the problem [3]. On February 8 and 9, 2006, the FDA will hold an FDA Counterfeit Drug Initiative Public Workshop and Vendor Display near Washington DC, with a major focus on RFID and electronic drug pedigrees [4]; written or electronic comments can be submitted before or after the workshop, through February 24. This workshop is open to the public; online registration is recommended because seating is limited to 400.

## Fighting Back

Years ago Congress passed a law requiring that 20  
store).

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drugs have a "pedigree" -- paperwork that shows the trail of ownership from the manufacturer or from a major distributor, all the way to the pharmacy or hospital that dispenses the medicine. But the law has not been implemented effectively, in large part because distributors have objected. While they raised issues of cost of compliance, the more likely real issue was that the paperwork would reveal business information. If a distributor's customers could find out who its supplier is for each drug, and learn the entire chain back to the manufacturer, they would likely cut out that distributor the next time.

This is not the case with electronic records, where each bottle will have a unique identification number but not the pedigree information itself, which will be kept in databases elsewhere. A pharmacist, hospital, or distributor will not have access to those databases and could not trace the chain back. But the FDA or other law enforcement could trace it -- and talk to everyone who had legitimate custody of that drug, to find where it went from there.

\* The FDA did not insist on RFID (radio frequency identification -- see explanation below) as the technology for electronic tracing; bar codes could also be used. But RFID has become the leading candidate, for several reasons:

\* RFID can hold more information. Standard bar codes only identify the manufacturer and the product -- but standard RFID also includes a unique serial number for every bottle or other retail package. If the FDA finds a bad batch, it will know who was responsible for each bottle at every moment since it left the manufacturer -- or who was the last one to receive the drug before the chain was broken.

\* RFID can quickly read the serial number of every bottle in a case -- instead of requiring someone to unpack the case and scan every bottle's bar code by hand.

\* RFID will be difficult to counterfeit. Even if criminals forge the tags, they will have no way to add matching records to all the databases in the supply chain. And if they duplicate an existing serial number, or use a non-existent one, law enforcement or the drug manufacturer could easily learn that something is wrong. And there will be plenty of information to help investigate where the problem began.

## How RFID Works

RFID is the system used in many retail stores to detect store merchandise being carried out without being paid for. It is also becoming very important at this time for managing inventory in retail and other businesses. How does the machine by the exit door tell that store's merchandise from anyone else's? It uses a "tag" added to the merchandise, with a serial number unique to that product (or possibly, unique to that

The tag is like a tiny radio broadcasting station. The ones that will be used on pill bottles have no battery or other power source in them, so usually they cannot broadcast anything. But the tag also has a tiny loop of wire that will generate a little electricity when it is in a changing magnetic field. The magnetic field is supplied by the RFID reader, which gives a nearby tag enough power to turn on the transmitter and broadcast its serial number, which the reader then receives.

Magnetic fields do not carry very far, so the tag must be close to the reader for this to work. According to Glaxo, its system will require the pill bottle to be about a foot or less from the RFID reader (or a little more in a specially designed machine that shapes the magnetic field so that it can read all bottles in a case at once as that case moves through a tunnel).

Other kinds of RFID can work at greater distances. One kind uses radio waves instead of a magnetic field to send the power to the tag. Another system has a battery with the tag -- not planned for pill bottles because of the complications and expense of having a tiny battery on every bottle. How far these kinds of RFID can read depends on whose estimate you are looking at, but most of the articles we have read suggest a maximum range of about 100 meters or less, often much less. Close range works best, and for pharmaceuticals at least, this technology is being developed for tracking products at hand, not at a distance.

### **Comment: Privacy and RFID on Medicines**

There are serious privacy issues with RFID (see below). But we have not found problems with its use to track pharmaceuticals, for several reasons:

- \* There is no interest in tracking the drugs after they reach the patient -- only before.

- \* The RFID tag contains no patient information -- only the manufacturer, the product, and the serial number of that bottle or other package. This is written on the tag and applied to the bottle by the manufacturer, who does not know who the patient will be. Then this information can only be read, not altered or added to, by the pharmacy, distributors, or anyone else.

- \* Anyone worried about RFID could ask the pharmacy to put the drugs into a standard pharmacy bottle, which will not have an RFID tag. Or the patient could put the pills into a different bottle and discard the original. Be sure to save any necessary medical information -- and perhaps remove personal information from the container before discarding it.

- \* For drugs that are liquid or otherwise cannot be rebottled, anyone who is worried could block RFID by wrapping the bottle or other package in aluminum foil; this will stop the radio signal from getting out, no matter what kind of RFID is used.

We do not think doing so will be necessary, especially if an RFID reader has to be within a foot of the bottle to pick up any information. But people should know that they have this option if they are concerned.

The small privacy risk of RFID on medicine bottles must be balanced against the considerable risk of drug counterfeiting -- which has been substantial for years, and appears to be growing despite new legislation.

### **Other RFID Issues**

While we are not worried about RFID for tracking medicines and preventing counterfeiting, other uses do raise serious issues. We are particularly concerned about tags designed to be injected into humans and remain permanently. This is not science fiction; such a device has already been approved by the FDA and is in use.

The first uses of RFID injected into people are likely to be important and beneficial -- especially preventing medication errors in hospitals (although bar codes worn on the wrist already do this, much less intrusively). But next, RFID in people will be required for entry into certain rooms and buildings, and those who do not accept it will be barred from increasingly large areas of the society. Finally, RFID tags will be in almost everybody, and readers in public areas will keep track of where people are when, and who associates with whom.

And for an overview of security issues with RFID in passports, see <http://www.schneier.com/crypto-gram-0511.html#1>

Security expert Bruce Schneier noted that an early State Department proposal could have allowed terrorists or kidnappers to identify Americans on the street by electronically reading their passports -- or rig a bomb to explode if four Americans were nearby. Most of those passport problems have been fixed, thanks to the outcry of privacy and security experts -- but there could be additional undiscovered flaws. The new electronic U.S. passports could start being used in late 2006.

### **Privacy and Fear in a Computerized World**

Privacy has been in the news, but badly explained in the press. People think that if they have nothing to hide they have nothing to be concerned about. But the real issue in the U.S. today is not wiretapping. It is how to restrain a government that has already come close to claiming the right to imprison, torture, and kill anyone it chooses, U.S. citizens or otherwise, for any reason or none, with no real oversight or